

In The Claims

1-43 (Cancelled).

a 44. (New) A functional element attachable to a panel in a fluid tight manner,
comprising:

a shaft part having a shaft diameter defining a shaft axis;

a head part axially aligned with said shaft part; and

wherein said head part includes an annular wall having an outer diameter generally equal to said shaft diameter and distal end tapered radially inwardly defining an opening generally perpendicular to said axis.

45. (New) A functional element according to claim 44, wherein said distal end defines a generally rounded surface thereby providing a smooth interaction with the panel.

46. (New) A functional element according to claim 44, wherein said annular wall of said head part is deformable radially outwardly thereby forming first and second annular bulges spaced upon opposite sides of the panel.

47. (New) A functional element according to claim 44, wherein said opening defines an annular wall tapering conically inwardly toward said shaft portion.

48. (New) A functional element according to claim 47, wherein said annular wall tapers radially inwardly between generally 30° and 40°.

49. (New) A functional element according to claim 47, wherein said annular wall tapers radially inwardly between generally 45° and 90°.

50. (New) A functional element according to claim 44, wherein said shaft defines a bolt element.

51. (New) A functional element according to claim 44, comprising a nut element.

52. (New) A functional element according to claim 44, comprising a tube section high pressure formed into said head part and said shaft part.

53. (New) A functional element according to claim 44, comprising at least one of a tube section, wire material, and bar stock cold formed into said head part and said shaft part.

54. (New) A functional element and panel assembly forming a fluid tight seal, comprising:

a panel

a shaft part having a shaft diameter defining a shaft axis;

a head part axially aligned with said shaft part; and

wherein said head part includes an annular wall deformably compressed thereby forming a first generally annular bulge and a second generally annular bulge sandwiching at least a portion of said panel therebetween thereby securing said functional element to said panel.

55. (New) The assembly as set forth in claim 52, wherein said panel forms a continuous sheet surrounding said head part of said fastening element.

56. (New) The assembly as set forth in claim 52, wherein said head portion includes a distal end deformed inwardly toward said shaft portion thereby defining a generally concave shape.

57. (New) The assembly as set forth in claim 52, wherein said first generally annular bulge is disposed in a plane generally equal to a plane defined by said panel.

58. (New) The assembly as set forth in claim 52, wherein said first generally annular bulge and said second generally annular bulge define an annular slot and said panel is deformed radially inwardly into said annular slot.